

INDEX OF SURGICAL PROGRESS.

HEAD AND NECK.

I. Case of Cerebral Abscess in Connection with Otitis Media, Successfully Diagnosed and Evacuated. By D. FERRIER, M.D. (London) and VICTOR HORSLEY, F.R.C.S. (London). Two cases similar to this one have been recorded, and also two others which differed materially in that they presented, in addition to the general symptoms, external indications of the seat of abscess in the shape of localized pain and oedema of the skull, and a fistula leading from the primary seat of disease.

The latter two cases, (referred to by Greenfield) are reported, respectively, by Schondorff (*Monatschrift f. Ohrenheilkunde*, 1885, No. 2), and by Trinckenbrod (translated in *Archives of Otology*, June to September, 1886).

The two formerly mentioned cases are that of Gowers and Barker (*Brit. Med. Jour.*, Dec. 11th, 1886), and that of Greenfield (*Brit. Med. Jour.*, February 12th, 1887). The former was a case of abscess in the right temporo-sphenoidal lobe associated with suppuration in the middle ear and mastoid cells. The mastoid was trephined first and symptoms persisting, the cranial cavity opened afterwards. In Greenfield's case an abscess was situated in its anterior part of the left temporo-sphenoidal lobe. In addition to the general indications of abscess, there were symptoms of pressure on the third nerve, a fact which prohibited the localization of the seat of the abscess.

Ferrier's and Horsley's case, therefore, is to be classed with Gowers' and Barker's and with Greenfield's case, and, from its importance, deserves careful study.

T. H., aet. 47, male, taken ill on Nov. 10th, 1887. Nov. 15th, discharge, rather offensive, from left ear. Seen first Nov. 25th, he had

pain over left side of head, forehead and back of eyes, with a considerable degree of photophobia. The pain was interrupted by pressure and percussion. Still slight discharge from left ear which could not be examined because of its tenderness. Pupils and vision normal. No motor or sensory paralysis. P. 52, weak and intermittent; resp. 14, labored and sighing; temp. normal. Improvement for four days, but patient generally sleeping. More discharge from ear.

Nov. 30th, very drowsy; difficult to arouse. More pain at back of eyes. Headache. P. 60; resp., 16: temp. absolutely normal.

Dec. 1st and 2d. Similar, but more drowsy.

Dec. 3d. Temporary delirium.

Dec. 5th. Slight weakness in right angle of mouth.

Dec. 6th. Speech affected; wrong words used.

Dec. 8th. Dr. T. W. Coffin in whose charge the patient was, called in Dr. Ferrier. Patient now less drowsy and much clearer in intellect than he had been for some time. But his words were incoherent and, for the most part, unintelligible. Partial paralysis of right angle of mouth. Abscess of brain diagnosed and patient's removal to hospital advised.

Patient seemed slow to understand what was said to him. Spoke more intelligibly but often used wrong words. Grasp of right hand, 80 pounds, and of left, 100 pounds, (patient right-handed).

Well-marked optic neuritis, with a small haemorrhage over the right disc, and a whitish band below that of the left. Taste and smell normal. Watch, on left side, heard only on contact. Left auditory meatus full of purulent secretion. No pain in head. Spot tender to pressure and percussion two inches above and just anterior to a line drawn upward from the external auditory meatus.

Diagnosis.—There had been no vomiting, convulsions or febrile disturbance or other indications of meningeal inflammation. The onset had been too rapid for tumor: besides there were the aural discharge, etc.

Dr. Ferrier "had no doubt that the patient was suffering from cerebral abscess." With regard to there having been no rise of temperature, many cases of cerebral abscess appear to run their course without

causing febrile disturbance, the temperature being in some rather sub-normal than the reverse."

Localization.—This was effected by (1) consideration of the weakness of the right angle of the mouth, the ataxic speech, and slight degree of 'word-deafness,' and (2) the discovery of a tender-spot. The situation of 2 confirmed the indications drawn from 1. The disease was likely to be close proximity to the speech and auditory centres of the left hemisphere, but not actually destroying them. Such a lesion would be an abscess situated in the anterior third of the temporo-sphenoidal lobe and abutting or pressing on the fissure of Sylvius.

It is true that the position of the tender spot is not an infallible guide to localization, e.g. Mr. Hulke (*Brit. Med. Jour.* July 3d, 1886), records a case in which there was a tender spot above the ear, whereas the abscess was in the cerebellum; and in a second, pain was felt acutely in the occiput, whilst the abscess was in the temporo-sphenoidal lobe. Nevertheless the presence of a tender spot, if its situation corresponds with the other symptoms, is very significant.

Mr. Horsley reports the *operation*, (previously pointing out that the optic neuritis, though intense on both sides, was worse on the side opposite to the abscess (as in Gowers' and Barker's case)).

Dec. 10th, 1887, Chloroform, head asepticized, etc. External auditory meatus cleansed with boracic. T-shaped incision. Junction of lines corresponded with painful spot; perpendicular descended to front of ear. Temporal muscle and periosteum reflected together. Bone doubtfully yellow at tender spot. Inch disc removed. Dura congested, bulging, without pulsation; dark purplish. Dura opened; dark red oedematous brain tissue bulged strongly through incision. As it was fairly certain that the abscess extended deeply into the temporo-sphenoidal lobe, the lower half of the circumference of the hole in the bone was cut away into a V-shaped notch. The dura was opened further by another incision vertical to the first. Brain punctured by ordinary trocar and canula (about 3 millimètres diameter) pus found at a depth of 1 centimètre .Amount of pus 3v, inodorous and creamy. Canula kept in until no pus and only blood oozed through it, and then replaced by the inner tube of a small tracheotomy canula; (this was changed next day for a smaller silver drainage tube).

No syringing, pus so inodorous. Parts readjusted; sutures; compound antiseptic dressing (carbolic, boracic and sal alembroth); temp. rose to 101° on second night; then fell to normal and remained so.

Vomited a little for a day or two. Aphasia, etc., gradually passed away.

January 5th. (26 days after operation) The paralysis, or rather paresis, had apparently disappeared, but the grip was still deficient on the right side, viz: 90-100. The fundi oculi, examined by Mr. Brudenell Carter, showed no trace of haemorrhage, and swelling of disc had almost vanished.

Such is the history (in abstract) of this excellent example of an interesting class of cases, now shown to be amenable to surgical treatment of a kind not very difficult or dangerous.

C. B. KEETLEY (London).

II. Fracture of the Larynx; Emphysema of the Neck; Laryngotomy—Death. By F. H. BARENTE (Booth).—The patient [age not stated] was a foot-ball player, and during the course of the game he received a violent blow over the trachea from a man's elbow. He was admitted suffering from stridulous dyspnea; speech was painful and voice husky. Expectorated blood-stained phlegm; subcutaneous emphysema of neck on both sides. Handling the thyroid caused great pain, and while doing so crepitus could be felt on the left side. Punctures were made to let out the air and relieve the tension of the tissues, and the dyspnea was relieved by this procedure. The symptoms, however, subsequently increased in severity, and suffocation being imminent, laryngotomy was performed. During the operation, which was difficult, owing to the inflated condition of the parts, it was found that the left ala of the thyroid was fractured, but not separated completely from its fellow. The lower margin of the left alar cartilage was divided, and the knife was inserted here and prolonged downward, cutting through the crico-thyroid membrane. Immediately air had free access, and the patient quickly became intelligible. A Bryant's tracheotomy tube was inserted and the patient placed under a steam tent. The case progressed favorably upon the